

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2004/002374

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A01K67/027 C07K14/705 G01N33/50 A61K49/00 C12N5/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01K C07K G01N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/006639 A1 (GENOWAY; THIAM, KADER; RATTIS, FREDERIQUE; BERTAUX, FABIEN; FRAICHARD,) 23 January 2003 (2003-01-23)	1, 2, 5, 35, 36, 39
Y	page 4, line 27 - page 6, line 9	3, 6, 8-10, 16, 22-34, 37, 40
X	WO 02/059263 A2 (SUNOL MOLECULAR CORPORATION) 1 August 2002 (2002-08-01)	1, 2, 5, 35, 36, 39
	page 7, lines 1-15 page 11, lines 1-7 page 12, lines 4, 5 page 18, lines 15-20 table 1	
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

25 January 2005

Date of mailing of the international search report

14/02/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>BENMOHAMED LBACHIR ET AL: "Induction of CTL response by a minimal epitope vaccine in HLA A*0201/DR1 transgenic mice: Dependence on HLA class II restricted TH response" HUMAN IMMUNOLOGY, vol. 61, no. 8, August 2000 (2000-08), pages 764-779, XP002314834 ISSN: 0198-8859 cited in the application the whole document</p>	<p>3,6, 8-10,16, 22-34, 37,40</p>
Y	<p>STEINMETZ MICHAEL ET AL: "Recent experiments with MHC knock-out mice: More questions than answers" BIOESSAYS, vol. 15, no. 9, 1993, pages 613-615, XP008041905 ISSN: 0265-9247 page 613</p>	<p>6,40</p>
A	<p>US 2003/101465 A1 (LAWMAN PATRICIA ET AL) 29 May 2003 (2003-05-29) paragraph '0042!</p>	<p>1</p>
T	<p>PAJOT ANTHONY ET AL: "A mouse model of human adaptive immune functions: HLA-A2.1-/HLA-DR1-transgenic H-2 class I-/class II-knockout mice." EUROPEAN JOURNAL OF IMMUNOLOGY. NOV 2004, vol. 34, no. 11, November 2004 (2004-11), pages 3060-3069, XP002314836 ISSN: 0014-2980 the whole document</p>	<p>1-3,5,6, 8,37,39, 40</p>
T	<p>PAJOT ANTHONY ET AL: "Comparison of HLA-DR1-restricted T cell response induced in HLA-DR1 transgenic mice deficient for murine MHC class II and HLA-DR1 transgenic mice expressing endogenous murine MHC class II molecules" INTERNATIONAL IMMUNOLOGY, vol. 16, no. 9, September 2004 (2004-09), pages 1275-1282, XP002314835 ISSN: 0953-8178 the whole document</p>	<p>1</p>

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Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 4, 7, 38, 41
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 4, 7, 38,41

The specific sequences of claims 4, 7, 38 and 41 have, according to PCT Rule 13ter.1.c., not been searched since the Sequence Listing as present in the description does not comply with WIPO Standard ST 25 prescribed in the administrative instructions under Rule 5.2. The Sequence Listing has not been furnished in machine readable form as provided for in the same instructions and the applicant has not remedied the disclosed deficiencies within the time limit fixed in the invitation pursuant to PCT Rule 13ter.1.a.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 03006639	A1	23-01-2003	FR	2827302 A1		17-01-2003
			CA	2453928 A1		23-01-2003
			EP	1414949 A1		06-05-2004
WO 02059263	A2	01-08-2002	CA	2432133 A1		01-08-2002
			EP	1409646 A2		21-04-2004
			US	2003093818 A1		15-05-2003
US 2003101465	A1	29-05-2003	AU	6869198 A		20-10-1998
			EP	0972039 A1		19-01-2000
			WO	9842838 A1		01-10-1998